

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	5	MITANI-SHIGENOBU.in.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 07:28
L2	3	1 and speaker	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 07:29
L3	19990	surround with frame	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 07:29
L4	863	3 and speaker	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 07:29
L5	66	spider with frame with bobbin	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 07:30
L6	61	5 and speaker	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 07:29
L7	20	(fix\$3 or attach\$3) with spider with frame with bobbin	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 07:30
L8	6	(US-6993146-\$ or US-6714656-\$ or US-6636612-\$ or US-6343128-\$ or US-4566178-\$ or US-4239944-\$). did.	USPAT	OR	ON	2006/12/04 08:24
L9	2	8 and (lead and terminal)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 08:38
L10	2	8 and terminal	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 08:26
L11	2	8 and welding	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 08:25
L12	2	8 and weld\$3	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 08:26
L13	2	9 and frame	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 08:40
L14	2	ultrasonic near complex near vibrati\$3 near weld\$3	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 08:42

## EAST Search History

L15	15	ultrasonic with complex with vibrati\$3 with weld\$3	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/12/04 08:42
L16	1	(US-20030043728-\$).did.	US-PGPUB	OR	ON	2006/12/04 08:50
S1	487	electrostatic adj transducer	USPAT; JPO; DERWENT	OR	ON	2005/01/13 08:52
S2	146	electrostatic adj speaker	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:10
S3	264	electrostatic adj (speaker or loudspeaker)	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:09
S4	8124	acoustic adj transducer	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:09
S5	2262	sound adj transducer	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:09
S6	616	microphone adj transducer	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:10
S7	138	electrostatic adj microphone	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:10
S8	11446	(electrostatic adj transducer) or (electrostatic adj speaker) or (electrostatic adj (speaker or loudspeaker)) or (acoustic adj transducer) or (sound adj transducer) or (microphone adj transducer) or (electrostatic adj microphone)	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:22
S9	774	381/113,116,191,174.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:11
S10	215	((electrostatic adj transducer) or (electrostatic adj speaker) or (electrostatic adj (speaker or loudspeaker)) or (acoustic adj transducer) or (sound adj transducer) or (microphone adj transducer) or (electrostatic adj microphone)) and 381/113,116,191, 174.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:11
S11	1890	29/592.1,594,609.1.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:14

## EAST Search History

S12	37	381/113,116,191,174.ccls. and 29/592.1,594,609.1.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:19
S13	0	381/113,116,191,174.ccls. and (pcb with stator)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 08:46
S14	73	((electrostatic adj transducer) or (electrostatic adj speaker) or (electrostatic adj (speaker or loudspeaker)) or (acoustic adj transducer) or (sound adj transducer) or (microphone adj transducer) or (electrostatic adj microphone)) and 29/592.1,594, 609.1.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:19
S15	1	((electrostatic adj transducer) or (electrostatic adj speaker) or (electrostatic adj (speaker or loudspeaker)) or (acoustic adj transducer) or (sound adj transducer) or (microphone adj transducer) or (electrostatic adj microphone)) and 381/113,116,191, 174.ccls.) and ((circuit adj board) with stator).	USPAT; JPO; DERWENT	OR	ON	2004/01/20 15:22
S16	10	("1844219"   "3668336"   "4122302"   "D302979"   "5369701"   "5392358"   "5533129"   "6035962"   "6175636"   "6188772").PN.	USPAT	OR	ON	2004/01/20 15:20
S17	0	"6201874".URPN.	USPAT	OR	ON	2004/01/20 15:26
S18	13	("1747952"   "1764008"   "1782278"   "1799053"   "1809754"   "1839130"   "1844219"   "1851240"   "1859170"   "2864899"   "3859477"   "4041446"   "4284921").PN.	USPAT	OR	ON	2004/01/20 15:26
S19	1	"1839130".URPN.	USPAT	OR	ON	2004/03/03 14:16
S20	297	speaker and (magnetic adj circuit) and coil and damper and diaphragm	USPAT; JPO; DERWENT	OR	ON	2004/03/03 14:18
S21	26	(speaker and (magnetic adj circuit) and coil and damper and diaphragm) and jig	USPAT; JPO; DERWENT	OR	ON	2004/03/03 14:18
S22	10	("2084945"   "3456755"   "3801943"   "4118605"   "4132872"   "4387275"   "5042072"   "5590210"   "5734132"   "5933508").PN.	USPAT	OR	ON	2004/03/03 14:19

## EAST Search History

S23	718936	\$4speaker or receiver or microphone	USPAT; JPO; DERWENT	OR	ON	2004/08/06 08:48
S24	22	frame and diaphragm and (voice adj coil) and protector	USPAT; JPO; DERWENT	OR	ON	2004/08/06 08:50
S25	21	(\$4speaker or receiver or microphone) and (frame and diaphragm and (voice adj coil) and protector)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 08:49
S26	0	(((\$4speaker or receiver or microphone) and (frame and diaphragm and (voice adj coil) and protector)) and die	USPAT; JPO; DERWENT	OR	ON	2004/08/06 08:50
S27	11031	(\$4speaker or receiver or microphone) and die	USPAT; JPO; DERWENT	OR	ON	2004/08/06 08:50
S28	1478	frame and diaphragm and (voice adj coil)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 08:50
S29	53	(((\$4speaker or receiver or microphone) and die) and (frame and diaphragm and (voice adj coil))) and @ad<"20001115"	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:09
S30	62	(((\$4speaker or receiver or microphone) and die) and (frame and diaphragm and (voice adj coil))	USPAT; JPO; DERWENT	OR	ON	2004/08/06 08:59
S31	4	("3014996"   "4465905"   "5091958"   "5757945").PN.	USPAT	OR	ON	2004/08/06 09:01
S32	5	("3209084"   "4037061"   "4468530"   "4803733"   "4837838").PN.	USPAT	OR	ON	2004/08/06 09:03
S33	2	("3014996"   "4465905").PN.	USPAT	OR	ON	2004/08/06 09:04
S34	1146	diaphragm with die	USPAT; JPO; DERWENT	OR	ON	2004/08/06 09:05
S35	58	(diaphragm with die) and (mold\$3 adj die)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 09:05
S36	13	(\$4speaker or receiver or microphone) and ((diaphragm with die) and (mold\$3 adj die))	USPAT; JPO; DERWENT	OR	ON	2004/08/06 09:11
S37	7	"5283027".URPN.	USPAT	OR	ON	2004/08/06 09:06
S38	6	("4362787"   "5066351"   "5125473"   "5283027"   "6208020"   "6332262").PN.	USPAT	OR	ON	2004/08/06 09:06

## EAST Search History

S39	4	("4315557"   "4752643"   "4857255"   "5066351").PN.	USPAT	OR	ON	2004/08/06 09:08
S40	20	"5066351".URPN.	USPAT	OR	ON	2004/08/06 09:09
S43	3126	264/212,216,320,323,331.12.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/08/06 09:50
S44	2	(diaphragm with die) and ((\$4speaker or receiver or microphone) and 264/212,216,320,323,331.12.ccls.)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 09:50
S45	34	(\$4speaker or receiver or microphone) and 264/212,216,320,323,331.12.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/08/06 09:55
S46	7	"5283027".URPN.	USPAT	OR	ON	2004/08/06 09:51
S54	1267	bond\$3 with frame with weld\$3	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:05
S55	54	(\$4speaker or receiver or microphone) and (bond\$3 with frame with weld\$3)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:05
S56	805	228/181,190.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:06
S57	0	(((\$4speaker or receiver or microphone) and (bond\$3 with frame with weld\$3)) and 228/181,190.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:06
S58	5	(\$4speaker or receiver or microphone) and 228/181,190.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:06
S59	280	228/181,190.ccls. and weld\$3	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:06
S60	0	(((\$4speaker or receiver or microphone) and (bond\$3 with frame with weld\$3)) and (228/181,190.ccls. and weld\$3)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:07
S61	3	(\$4speaker or receiver or microphone) and (228/181,190.ccls. and weld\$3)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:09
S62	1933	weld\$3 with resin with metal	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:09
S63	31	(\$4speaker or receiver or microphone) and (weld\$3 with resin with metal)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:09

## EAST Search History

S65	177	weld\$3 with speaker	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:15
S66	4	(bond\$3 with frame with weld\$3) and (weld\$3 with speaker)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 10:12
S67	2	weld\$3 with diaphragm with frame with speaker	USPAT; JPO; DERWENT	OR	ON	2004/08/06 11:22
S70	6868	156/73.1,250,267,292,293,297.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/08/06 11:21
S71	85	(\$4speaker or receiver or microphone) and 156/73.1,250,267, 292,293,297.ccls.	USPAT; JPO; DERWENT	OR	ON	2004/08/06 11:21
S72	0	(((\$4speaker or receiver or microphone) and 156/73.1,250,267, 292,293,297.ccls.) and (diaphragm with frame with (voice adj coil))	USPAT; JPO; DERWENT	OR	ON	2004/08/06 11:22
S73	2	(((\$4speaker or receiver or microphone) and 156/73.1,250,267, 292,293,297.ccls.) and (diaphragm with frame)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 11:23
S74	1	(((\$4speaker or receiver or microphone) and 156/73.1,250,267, 292,293,297.ccls.) and (diaphragm with resin)	USPAT; JPO; DERWENT	OR	ON	2004/08/06 11:23
S27 1	0	resin with diaphrame	USPAT; JPO; DERWENT	OR	ON	2005/01/13 08:52
S27 2	4302	resin with diaphragm	USPAT; JPO; DERWENT	OR	ON	2005/01/13 08:53